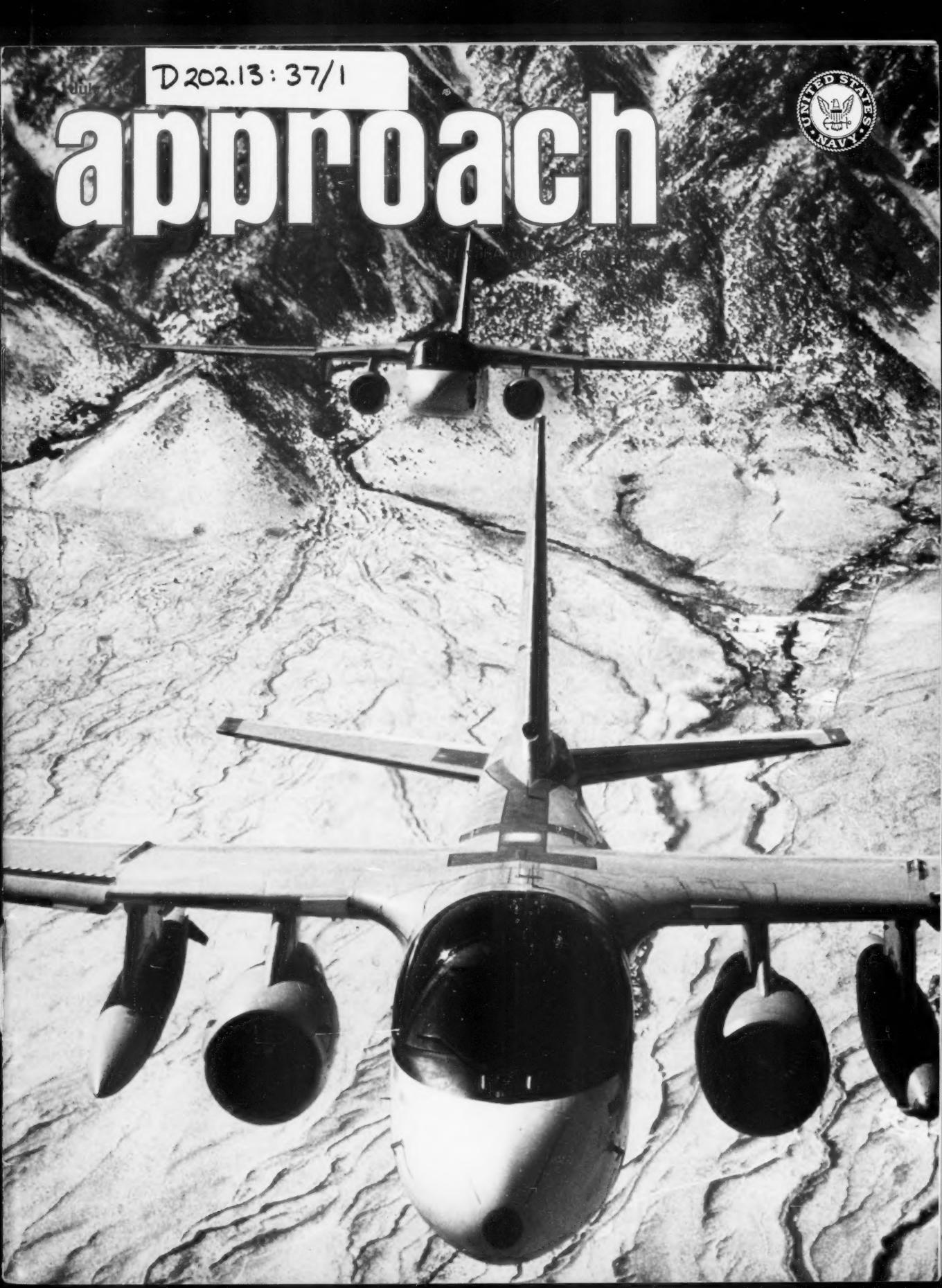


July 1989

D 202.13 : 37/1

approach



Editorial



Lt. Sue Hart

Inbound from another successful raid on the blue forces, a sky-darkening flight of Whales is in search of something fun to do. Mt. Fuji! Yeah, wouldn't that be too cool. My trusty wingman has his gee-whiz-bang camera. "Let's go get some pix over a volcano" I suggest.

I've got the lead, so with the calm assuredness of a seasoned navigator I inform my driver confidently to make a course . . . "that away."

Nothing but blue sky and scattered white puffs to the horizon. What a great day to fly. I'm feeling quite grand. There it is, majestic Mt. Fuji, all 9,827 feet of it. I think I'll share a bit of banter with my comrades. I switch to base and quip, "Hey, anybody seen Mt. Fuji around here?"

Never, never say something inane over base when you're within range of your ready room. Apparently the skipper and a host of JOs (you know, those guys who never forget anything) were lounging about and heard every word. I paid dearly at the next kangaroo court and will soon be the proud owner of my first buffoonery centurion patch.

Aviators are notorious buffoons. How else can you explain the Tomcat pilot who makes several night approaches, bolters, complains about a dim ball, and has a dark visor? Why else would a perfectly good airplane, in a normal pattern, with no emer-

gencies land gear up? Why else would grown men dive belly first onto a smooth solid object and scream "OK-3!"?

Usually AOBs (Acts Of Buffoonery) are faux pas (fighter guys, look it up) and delta sierras we all laugh at or turn into exciting stories for *Approach*. Sometimes they are deliberate acts and sometimes they aren't. Unfortunately, sometimes they are unfunny Class A mishaps.

In an effort to keep fellow JOs out of trouble here are four important considerations for your next AOB.

1. If I'm caught will the skipper have a good guffaw after chewing my butt or will he remove my wings with a hacksaw?
2. Will it make me more popular at the O Club or will even the nuggets refuse to fly with me?
3. Will I earn a new call sign or a nice memorial speech?
4. How lucky do I feel?

I hope your next AOB is hilarious. Who knows? Maybe it will make you famous.

Lt. Steve Halsted



Lt. Peter Griffith

approach

Vol. 37 No. 1/July 1991

FEATURES

Toasted Hoover

By LCdr. Micheal S. French

Escorting a Toasted Hoover

By LCdr. J.M. Lillard and Lt. Steve White

Passed Out at 35,000 Feet

By Lt. A.B. Kimbell

Approach Art Director Retires After 36 Years of Service

By Peter Mersky

Just Hanging On

By Lt. Jack Schwart

One Foggy Day at Adak

By Lt. Christopher J. Walker

Can You Believe These Pictures?

By Capt. William F. Moroney, MSC (Ret)

My 12-Second Flight

By LCdr. Floyd R. Cordell

Have You Had A NMAC Yet?

By Lt. Warren Weisenburg

On the cover: S-3s of VS-38 fly over the Sierras. (PH1 Mike Flynn)

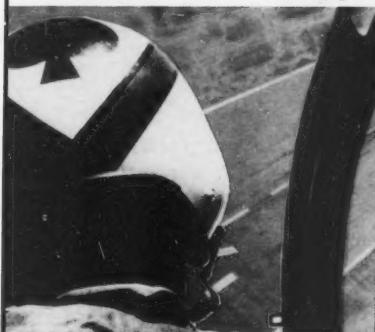
Approach (ISSN 0570-4979) contents should not be considered directive and may not be construed as incriminating under Art 31 of the Uniform Code of Military Justice. Views expressed in guest-written articles are not necessarily those of the Naval Safety Center. The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law. It is funded and printed in accordance with all Navy publishing and printing regulations and approval of the Navy Publications and Printing Policy Committee. Second-Class Postage Paid at Norfolk, Va., and additional mailing office. *Approach* is available for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. POSTMASTER: Send address changes to *Approach* Magazine, Naval Safety Center, NAS Norfolk, VA 23511-5796.

2



see page 2

4



see page 14

6



see page 16

7



see page 30

10



14



16



Super Stallion the New SAR Star? 18

By Lt. T.J. Mueller

Thunderbumper Buckeye

By LCdr. Skip Slyfield

Are Your Three Bags Full?

By Cdr. John Indorf

No Big Deal

By Lt. Gavin W. Balan

Formation Barrel Roll in an S-3? 27

By Lt. Nelson Hendricks

The Aviation Life Support Systems Operator Advisory

By LCdr. D.C. Nimmich, Jr.

Stick in my Lap, Throttles to Military

By Lt. Mark Kelly

Mishap Statistics

32

DEPARTMENTS

Bravo Zulu

20

Letters

IBC

RAdm. J.H. Finney, Commander, Naval Safety Center

Col. John P. Oppenhuizen, Deputy Commander

Capt. W.J. Mooberry, Chief of Staff

Capt. K.G. Craig, Director, Aviation Safety Programs

Cdr. John D. Reid, Head, Media and Educational Support

Lt. Steve Halsted, Editor

Peter Mersky, Asst. Editor

John Williams, Acting Art Director

Approach is a monthly publication published by the Commander, Naval Safety Center. Address comments, contributions and questions about distribution and reprints to:

Commander, Naval Safety Center

NAS Norfolk, VA 23511-5796

Attention Approach - Code 71

Telephone: Commercial 804-444-7416; Autovon 584-7416

Toasted

Harry S. Baer



2

Near the end of a combat mission in the Arabian Gulf, we saw a fire light on our No. 1 engine. That's not a big deal in the Viking; it's rarely a fire and the jet flies great on one engine. We turned toward mother, started our climbout and followed NATOPS by shutting down the engine. An alert E-2 and a surface ship heard our emergency call and vectored a Tomcat to escort us the 150 miles to the carrier.

After 3-4 minutes, the fire light went out and we all breathed sighs of relief. The F-14 joined up and said he saw a two-foot hole in the outboard side of the engine nacelle. We thought we might have taken enemy fire since we had flown by an oil

platform just before the fire light came on. However, the fighter also reported that the hole had blown out, not in, and there was no other visible damage, so hostile fire was ruled out.

At about 100 miles from the ship, we started to get smoke and fumes in the cockpit along with some intermittent electrical problems. One look down the tunnel and it was clear this wasn't our day. The SENSO saw smoke billowing out of the starboard internal avionics bay.

We strapped on our oxygen masks, gave the F-14 the lead, and secured our electrical buses, leaving only essential navigation equipment and backup ICS and UHF. The smoke stopped and the

cabin cleared up so it looked like things were going to be all right. That's when the pilot got a call from the Tomcat on the backup radio that the engine was still burning. NATOPS says, "If fire persists and is uncontrollable, eject."

I've never had to go through the controlled ejection checklist, but there we were, the SENSO walking through each item as we prepared to jettison our Viking. After completing the checklists, we weighed our options. One of the benefits of the Viking's pod-mounted engines is that one of them can quick-fry to a crackly crunch and not interfere with the plane's flying qualities.

Since the engine fire didn't appear immedi-

I always thought that if I had to eject, it would be a soft cat or broken pendant forcing me to eject immediately.

ately catastrophic, we decided to press on. We calculated the climb rate for single-engine, gear-down, bingo-fuel. We told the tower that we needed a ready deck and intended to shut down and egress in the landing area. At that point, we felt we were ready for almost anything.

The F-14 led us to a right base and gave us the dirty-up signal. To dirty up, we energized the right electrical bus and the utility hydraulic pump to give us full

hydraulic systems. The dirty-up and approach went fine and the pilot flew an OK-underlined single-engine pass. We safed our seats and got out while the fire crew took care of our No.1 engine.

I never thought through a controlled ejection, and I was not ready for one. I always thought that if I had to eject, it would be a soft cat or broken pendant forcing me to eject immediately. I had almost told the Tomcat

that we didn't need any help and we could make it on our own. I sure am glad we didn't do that. It was great to be able to tell him, "You've got the lead; we're going NORDO. Get us home."

I never fully realized the value of a well-trained, NATOPS-qualified SENSO. He literally drove us through the checklists and monitored the entire situation, ensuring we considered

every option.

Finally, talking to the E-2 was gouge. He had three small boys at flight quarters with helos turning to pick us up if we had to eject. I know it's last on the list of aviate, navigate, communicate, but in the S-3, with four crewmen, we could pass the word from the TACCO's station while the frontseaters handled the fire and the trip home.

LCdr. French is an NFO with VS-24.
Please see article on page 4
for another view. -Ed.

3

Firefighting crews move in as the S-3 crew evacuates.



Escorting a Toasted

**...the trickiest
part of the escort
began.**

Hoover

By LCdr. J.M. Lillard and Lt. Steve White



**An S-3's dirty-up and
approach speeds are in the
F-14's stall region...**

Arabian Gulf operations had been pretty quiet for the Tomcats. The lack of aerial opposition restricted our missions to basic CAP. A wartime mission doesn't prevent the usual mishaps, however, nor does it restrict aircrew from exercising their basic skills.

Toward the end of another three-hour CAP, we heard our controller say that he needed an escort for another aircraft with an inflight emergency. Since our radar was only marginal we volunteered.

The emergency plane turned out to be an S-3 with a fire-damaged left engine. The Viking pilot had secured his engine and extinguished the fire, and was on a low-altitude, single-engine route back to the ship.

We were concerned about the S-3's ability to keep flying. The engine nacelle was beat up with fire dam-

age, but at least it wasn't trailing fuel or smoke. We also looked for collateral damage. The cowling looked like it had suffered a chunk failure of the turbine at the nine o'clock position. If this had been the case, the D-708 buddy store would have taken a major hit, but the store was intact. The Viking had been bird-dogging a small boat when the engine failed, and the pilot thought he might have been hit by small arms fire. From our vantage point, we couldn't confirm battle damage.

With vectors from an E-2 and a good TACAN lock, we headed toward the ship. At 100 miles, we broke out the various information needed to escort the S-3. Granted, everything looked OK, but when chutes are in the air, there's no time to go through your nav bag.

Of course, a real situation isn't complete without further complications. The pilot reported an electrical fire in his tunnel and that he would have to go NORDO and secure all electrical power. We took the lead, passed this news to the E-2, and told him that we would set the S-3 up for a right downwind entry to the BRC

(which was 180 degrees out from our present heading) to avoid any turns into the S-3's dead engine. We planned for a close hook-in and dirty-up. In case he still had some navigation equipment, we also asked that the ship turn its ILS on.

Suddenly, the engine fire started up again and it looked like the SAR checklists would be needed after all. We couldn't tell the S-3, so on the chance that he was monitoring guard on his PRC-90, we called in the blind. We also got close and passed visual signals, but until he turned his radio back on for the final approach, we weren't sure he understood.

Residual fire in a pod-mounted engine is nothing to gaff off, but it's not as serious as a fire in a fuselage-mounted engine. The S-3 pilot told us later that while his crew briefed for a controlled ejection, they had every intention of trapping.

Now, the trickiest part of the escort began. An S-3's dirty-up and

approach speeds are in the F-14's stall region, and the standard section approach taught in the training command was out of the question. Once he was dirty, there was no way we could stay with him, but we gave it our best shot. Fortunately, he trapped on the first try.

While aviate-navigate-communicate is one of flight school's first lessons, we sometimes forget when things get tight. Letting the E-2 coordinate our progress took a big burden from us. Dissimilar approaches are not a big deal when leading Hornets or Intruders, but the Viking is another story because of its approach speed. Fortunately, some unknown bubba who had been in our squadron had taken the time to make up a dissimilar approach speed gouge card. A clean S-3 (or E-2) can stay with a dirty F-14 or F/A-18 quite easily, so we planned to dirty up on our own and pass signals to the S-3 at the appropriate speed for him. He got the message and all we had to do was monitor his gear extension. ◀

LCdr. Lillard and Lt. White fly with VF-41.



Lt. Steve Whitaker



Passed Out at 35,000 Feet

By Lt. A.B. Kimball

It was a beautiful Friday afternoon and the second leg of our cross-country was going smoothly. My back-seater was a student NFO (SNFO) in advanced jet training just five short flights away from wings.

I had leveled the TA-4J off at FL350 for about 10 minutes when my student reported that something was wrong with his oxygen mask. I told him to tighten his bayonet fittings and mask straps. I knew he was hypoxic when he didn't respond and kept staring straight ahead. I remembered from our pressure-chamber training that hearing was one of the last senses to go when you were hypoxic. I yelled over the ICS and banked sharply to get his attention.

"Can you hear me? Snap out of it!"

When he didn't respond, I knew he was out cold. I checked our cabin

pressure (19,000) which was normal for this altitude and I asked for an immediate descent. Center vectored me off the airway and cleared us to FL200. As we passed FL260, the student revived and repeated the last few items of a checklist he had completed several minutes before passing out.

Then he asked why we were descending. I filled him in on the events of the last two minutes. He hadn't realized he had been unconscious. We leveled off at FL220 (cabin altitude approximately 10,000) and continued to our destination.

After we landed, we had a PR check the student's mask. The rigger found that the mask fit poorly. The student had inadvertently checked out a regular mask from the squadron

equipment pool instead of the short mask he normally wore. He had not preflighted the new mask. On the first leg of our cross-country, our maximum altitude was 28,000 feet and he had not had any problems.

The Naval Flight Surgeon's Manual says that at 22,000 feet, the partial oxygen pressure of the air you breathe is at a level at which the brain will lose useful function in 5-10 minutes. At the time of the incident, we were at 19,000 feet and my student was on oxygen with only a small leak in his mask.

Symptoms of hypoxia include increased breathing rate, confusion, loss of coordination and loss of consciousness. Since these conditions are often prevalent among students, it's not unusual that mine didn't recognize these warning signs.

Lt. Kimball was an instructor with VT-86. He is now a TAR with VFC-12.

Bob Trotter, Approach's Art Director,

Retires After

36 Years of Service

By Peter Mersky

Bob Trotter's name may not be familiar to even longtime readers of *Approach*, and the rest of the Naval Safety Center's publications. However, Bob has been on the masthead for more than 35 years as the art director for the Safety Center's publications branch.

Then-Ltjg. Ted Wilbur hired Bob in 1955. "Bob picked up the mantle at a very tough time," now-retired Capt. Wilbur recently commented, "and he produced."

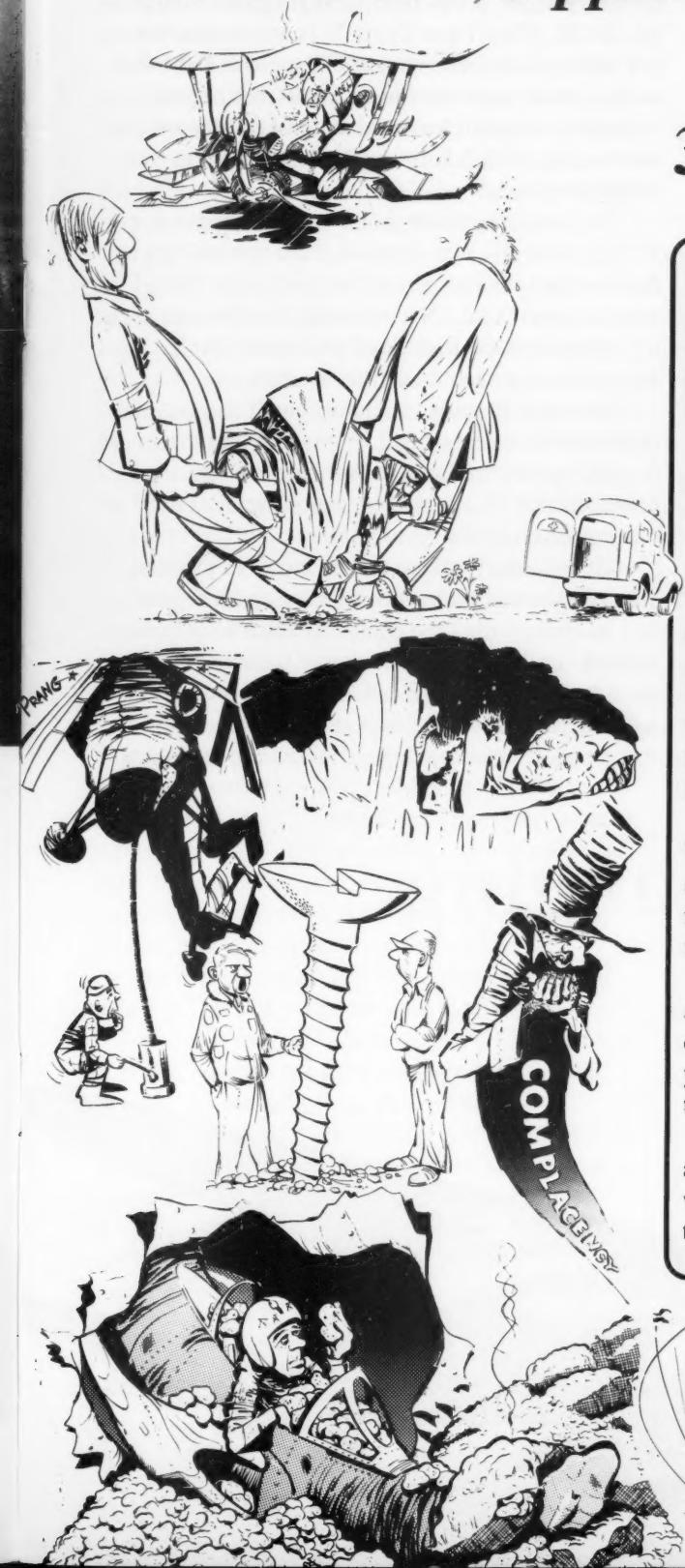
As a succession of Navy and Marine Corps analysts, writers and editors passed through over the years, Bob Trotter layed out thousands of pages, drew a myriad of cartoons and story illustrations, and sweated over countless deadlines. In this time of computer-driven, desktop-publishing-oriented publications, Robert Trotter is part of a vanishing breed of traditional artists and art directors, imbued with the sometimes-indefinable values of composition and draftsmanship.

As a young private, Bob served in Europe during World War II, went through the terrible winter of 1944-45, and was part of that stunned contingent of allied servicemen that entered the concentration camps to see first-hand the effects of Nazi oppression.

Later, as a member of the Safety Center, Bob became a plankowner in many of the efforts to bring a greater organization to the Navy's safety program. While most of you never knew him, you were beneficiaries of his expertise and dedication every time you read a page of *Approach*.

Bob Trotter's tenure seemed endless, but nothing is as constant as change. He retired on May 31. The staff here will miss his expertise and skill. The Fleet will miss him, too.

7



"Lost sight"—we brief it before every form hop. Our squadron has logical, deliberate procedures, which make it sound like it would be a controlled situation. I'm here to tell you that it's anything but that.

We were on the second leg of a three-leg cross-country. We had three Prowlers and the squadron's 12 senior aircrew members, the CO, XO, seven mission commanders and three LSOs. The flight lead, myself and the third pilot looked at the weather but didn't go into a detailed question-and-answer session with the forecaster like we should have. As a nugget pilot and the most junior of the bunch, I had a false sense of security. I figured that if there was something to be concerned about, the senior folks would talk about it.

We launched on the second leg and everything went fine until we were about 70 miles from our destination, Wright-Patterson AFB. Chicago Center was our controller. There was a solid wall of thunder clouds ahead that topped at 25,000 feet. The controller asked us to start our descent but we asked to stay at 27,000 feet until we flew over the thunderbumpers. He agreed but seemed anxious to get us to a lower altitude.

We passed over the line and told the controller we were ready to descend. He seemed very happy and

cleared us down to 12,000 feet. There were buildups everywhere, but it was sunny and gorgeous outside the clouds. When I was flying T-2s, my instructors told me to never take my eyes off my lead, but I was curious about what was ahead. I stretched out my wingtip-to-wingtip clearance and looked forward for a second. I couldn't believe what I saw: a solid wall of thunderclouds!

The first thing I thought of was my skipper in my T-2 squadron. He was adamant about not taking a division into clouds. (Since I've been in the fleet, I've seen it happen a lot.) No sooner did that thought cross my mind when the flight lead told center that he would like to detach Dash 3 for weather.

The controller was caught off guard and once he realized what we were asking, he grudgingly went off to get a squawk for Dash 3. We were on UHF but I could tell that he was also controlling at least one other aircraft on VHF.

All this time we were getting closer to this dark cloud. What was probably only 20 seconds seemed like an eternity until the controller came back with a squawk for Dash 3. I felt somewhat relieved as I saw the EA-6B peel off high and left, but it was obvious that the lead wanted me to peel off, too, because of that cloud. He tried calling center but the controller

Just Hanging On

By Lt. Jack Schwart



Courtesy of Tacelron ONE THREE FIVE

had already jumped to his VHF traffic and didn't hear his request.

Since it was CAVU outside the clouds, I half expected my lead to do a 360 to give us time to talk to the controller. As I worked my jet into what I knew would be an incredibly tight formation, I realized that lead's position and formation lights would probably help, so I called on the radio. His form lights wouldn't work.

At this point I said to myself, "Look, Jack, you're in the fleet now. You can hack it." I was ready to hang on. (My lead, with more than 2,000 hours in Prowlers, told me later that he knew no one was coming out of that cloud on his wing.) I was in there for the first 10 seconds, feeling confident, when the lead aircraft flickered for a second, but came right back. My backseater called on the ICS, "I lost him!" I was annoyed at his call because I could still see the lead and I was flying the plane. The distraction didn't last long, though, because about five seconds later, I lost him for good.

I delayed my cut away for a second, dimly hoping that he would reappear, when I realized what a dangerous situation I was in. Our SOP for lost sight in a descent is to take a 30-degree cut away and level off 1,000 feet above the lead's newly assigned altitude. At first, I had vertigo, and as I mechanically went through our lost-sight procedures, it dawned on me that I had no idea where we were, what the terrain was like, or what the MSA or ESA was. To make matters worse, we started picking up ice.

We didn't have an approach plate readily available and I suddenly felt the need to take positive action. I told my right-seater to talk to center and get a vector. He gave it a try but couldn't get through because the controller was still working his VHF traffic and my lead's right-seater was on the radio trying to explain to center how his wingman disappeared. The controller now had three Navy jets instead of one, we didn't have a squawk or a clearance, and I didn't know whether or not I was heading for a mountain.

Trying to improve my situation, I made a big mistake. I leveled off and headed for a piece of sky

that I knew had no clouds and no ice, 180 degrees behind me. I hung a right, figuring that it would keep me clear of Dash 3, and started back out. I fought my vertigo as I started a shallow climb that I couldn't seem to level out. I took a swag at what my reciprocal heading should be because I wasn't really sure what our entry heading was.

The turn was hell. There was confusion in the cockpit and on the radios, and the cockpit temperature was unbearably hot because my right-seater had the defog up full blast. Luckily, the turn worked and we broke out a minute later. The ice melted and so did my vertigo.

No longer disoriented or threatened by icing, I climbed to a VFR altitude, broke out an approach plate and took control of the situation. The potential midair I had set up with Dash 3 never occurred to me until we debriefed.

We finally contacted center, got a clearance and headed into Wright-Pat. There were a lot of red faces on deck—and a lot of valuable lessons learned.

Lost sight is not a controlled situation. If you lose your wingman or lead, you may have vertigo, be unsure of your position and probably find yourself behind the aircraft soon.

The lost-sight wingman has radio priority. Unless the lead has an emergency, he should stay off the radios. He has a clearance and a squawk; the wingman doesn't, and is now flying around IFR with no one controlling him. It's crucial that the lost-sight wingman get positive radar control immediately.

As a wingman, always be ready to assume the lead. You should know the weather. Just glancing over a DD-175-1 and assuming that the flight lead can sweat the big stuff won't cut it. Familiarize yourself with the terrain. When I lost sight, I had no idea what the ground was like below me. We didn't even have an approach plate out. Even on a GCA as a wingman, you should have the TACAN approach plate out for the runway you're shooting for.

Fly what you brief and get your crew involved. My impromptu 180 set up the real possibility of a midair. When things start happening, people will expect you to be right where you said you'd be. ▶

Lt. Schwart is a Prowler pilot with VAQ-135.



One Foggy Day at Adak

By Lt. Christopher J. Walker

"What a great day to fly!" I said as we descended on station in our P-3. It was uncharacteristically beautiful over the Bering Sea — no clouds, and visibility as far as the eye could see. A nice change from when we had taken off from Adak that morning. There had been an overcast, with ceilings from 900 feet to 10,000 feet, light rain showers and gusty winds — a typical day at Adak.

About two hours into our ocean-surveillance flight, my second pilot in the left seat asked where my gyro was referenced. I looked down and replied, "On the horizon. Why?"

"Really? Mine is about seven degrees nose high," he said. He switched from one attitude source to the other with no change. We climbed and descended, and found that the gyro responded normally except that the instrument referenced seven degrees nose up. We discussed and troubleshooted this minor malfunction and came up with the following discoveries.

When we made control inputs, both gyros functioned correctly, except that the left-seat's gyro had that seven-degree difference. Adak's weather was predicted to be the same when we landed as when we launched. The on-station weather was CAVU and we had only two hours before we turned for home.

We were all comfortable with our situation, and as patrol plane commander (PPC), I decided to continue the mission prepared to abort if things changed. The next two hours went fine, however, and after reaching our fuel limit we headed back.

I announced that I would make the landing and was eager to get into the seat and grease one on. The P-3 can be landed from either seat but since almost all of our training and landing practice is done from the left seat, only qualified PPCs can do it from the right seat.

I wanted to land from the left seat because the approach would be IFR with turbulence and some pretty strong crosswinds. I told the copilot that I would fly the approach remembering that the gyro was off. Approach updated our weather. Exactly what I thought: light to moderate turbulence, strong crosswinds and a solid deck down to about 1,000 feet. "Not a problem," I thought. "I've done plenty of these landings while deployed to Adak."

I asked for a PAR approach and briefed the ILS as a backup. As we descended VMC, we had no problem until we penetrated the clouds at 10,000 feet. It took a while for me to adjust to my instruments because no matter how hard I tried, and how many times I reminded myself about the gyro, my scan told me we were climbing when we were actually descending. Now, my airspeed and VSI became my main instruments and I continued, working harder than I usually did.

The controller checked in and said that she was a student under instruction. As we kept coming, it was evident that this was one of her first approaches. The rough turbulence added to my difficulties, and didn't help the controller, either.

When I looked at my altimeter and saw 1,000 feet, I thought, "Great, I'll be out of this soon." But the needle kept revolving lower and lower and we were still IMC. The approach minimums were 250 feet AGL. As we went through 500 feet, things really got interesting.

Here I was with a gyro telling me I'm climbing, it was raining, and I had turbulence and a crosswind. I was still IMC and should have broken out 400 feet earlier.

The controller was doing her best but was behind us. About five seconds passed without hearing anything from her. Finally, she asked, "Do you have the field in sight, yet?"

"No!" I screamed to my copilot, and the controller began bringing us back to what the ILS was telling me. I have never felt as nervous in an aircraft as I did at that moment. I started thinking about a missed approach even though we hadn't reached our minimums when suddenly, we broke out at about 350

"I've done plenty of these landings while deployed to Adak."

feet. I got my bearings, put in a healthy correction and landed. I was sure relieved to be on deck. (I don't think any of my cockpit crew knew how much that approach had taken out of me until I told them.) Some people say you can feel your heart beating a million times a minute under stress. It's true.

If you have any type of malfunction, you should insist on a qualified controller. The weather was forecast as VMC, so a student controller under training was used. Adak gets intermittent low decks and one came through just as I came in to land. ATC didn't know it and I hadn't said anything about my faulty gyro.

You should keep proficient with approaches and landings. Spread these evenly among the cockpit crew. PPCs should not feel bound to give up landings and approaches to the 2P or 3P.

I could have made the approach and landing from the right seat with a normal gyro. When you have looked at an instrument for 1,000 hours, your brain has a pre-programmed response. If you're IMC and the gyro tells you you're nose up, you naturally believe it. If I felt uncomfortable at any point, I could have had my copilot take over in the left seat once we broke out or waved off.

Lt. Walker is a PPC with VP-47.

Take a look at these photos of a static display. It's great that taxpayers get a chance to see Naval Aviation close up. Airshows are also a good recruiting opportunity. However, static displays are also mishaps waiting to happen, unless aircrews take precautions to protect their aircraft and the public.

These photos show that a few basic precautions were observed. Chocks are in place, the external canopy-jettison handle has been taped over, and safety pins are installed in the seats, landing gear and tanks.

There's only one problem, but it's a big one: the public was allowed to mix with the aircraft—fortunately, without disastrous results. Although the TA-4 was roped off and the aircrew briefed on the need for separation, people were allowed access to the plane. There was a breakdown in security. The base should have

Photos by Capt. William Moroney, MSC (Ret)



Both aircrew and base security crews need to be aware of their responsibilities for the safety of the aircraft and guests.

By Capt. William F. Moroney, MSC (Ret)

monitored each display.

Though the aircrew was there, they obviously neglected to "separate the aircraft and public" as required by OPNAVINST 3710.7N. The unprotected intakes and exhaust are inviting targets for a slam-dunk, especially with the handy supply of FOD. Adults, adolescents, children and their "ground support equipment" (chairs, ice chests, strollers,

Can You Believe These Pictures?

What the photos *don't* show is also important. There are people smoking under the aircraft, curious adolescents have opened the access panels, and children are sitting on the wings. These are all mishaps waiting to happen. What were the attitudes of the aircrew and base personnel responsible for the airshow? How did they plan to maintain aircraft security? Who was in charge?

Both aircrew and base security crews need to be aware of their responsibilities for the safety of the aircraft and guests. They need to carry out those responsibilities by enforcing the rules. Common sense should also temper the enthusiasm we have for Naval Aviation.

In the last 10 years, several incidents during airshows have killed people and destroyed property. A young boy ejected himself from an



S-3; there was no one in the aircraft to supervise visitors. A child discharged a P-3's emergency air brakes by pulling on the pilot's handle. Transient-line personnel manually opened a T-2's canopy, disengaging aft-

beam hooks. Fortunately, they told the pilot.

Other incidents have included an alert P-3 crewman who prevented a nine-year-old from entering the main load center, and two adolescents (who had been drinking) who pulled the canopy-jettison handles of an EA-6B, blowing the two gold canopies. (Criminal charges are pending on that one.)

COs and safety officers should review their instructions for static displays. The pilot of the aircraft in these photos said he was "generally familiar" with his squadron's instruction. He or the airfield's personnel should have had a formal checklist calling for, among other things, engine intake covers and specifying that the public be separated from the plane. 

Capt. Moroney works in the University of Dayton's psychology department.

13



My 12-Second Flight

By LCDR. Floyd R. Cordell

14



A

I came to work, I was surprised to find that my squadron had not finished the acceptance checkflight for our "new" A-6 from NADEP. On Saturday, a pitot-static problem forced the crew to land shortly after takeoff, so the SDO asked me to take the profile.

My pilot and I briefed the PMCF. We discussed single-engine high-power runups because the brakes wouldn't keep

the aircraft from skidding down the runway with only 8,000 pounds of fuel. We estimated the takeoff distance at 1,500 feet because of our low gross weight, a 35-degree runway temperature, and 25-knot headwinds. We were less thorough about emergency and ejection procedures.

As we completed our low-power control checks while taxiing, we noted that the hydraulics were noisier than usual. We completed a second wipeout while closely

monitoring the hydraulic gauges. Everything seemed normal, however, and we continued toward the runway.

After we got our takeoff clearance, we completed the single-engine high-power runups, then made the high-power control wipeout. I was busy copying the engine-performance data and didn't watch the wipeout as closely as I usually do. I did notice that the hydraulic needles didn't drop during rapid control cycling. The pilot said his controls were "free and moving" and asked if I was ready.

"All set," I replied and he released the brakes.

The low temperature, low gross weight and high winds allowed our Intruder to accelerate very impressively. Shortly after starting the roll, the pilot told me that the engine EGTs were good. I noted that the airspeed indicator was rapidly rising past 80 knots and looked at the system groundspeed to crosscheck the airspeed. Up to that point, our flight was going according to plan.

The pilot rotated. I thought the rotation was a little early and that we felt cocked up, but I attributed this to the high winds. Right after liftoff, the A-6 rolled about 30 degrees, right wing down. I saw a lot of brown grass zipping by. As I looked back across the cockpit in a vain attempt to find the ADI, the plane rolled 40 to 50 degrees left wing down. I could see the runway centerline about eight inches above the pilot's canopy rail.

"Do you have it?" I asked him. In the time it took to ask the question the plane rolled rapidly back to the right, sat on its tail and started to shudder. I didn't give him time to answer.

Although I didn't know what was wrong, I decided that I had to leave in a hurry. I threw my head back against the headrest and pulled the lower handle.

As I pulled the handle, I saw the pilot pushing the stick full forward and a lot of smoke in the cockpit. As I started up the rails, everything went black, although I could hear the seat's rocket motor.

When my vision returned, I saw my seat falling away between my feet and decided this was a good indication that I wouldn't hit the ground too hard. Then I felt the chute open and I thought about actuating the four-line release. When I looked down at the ground again, I decided that I really needed to get ready to hit the dirt. I tried to lift my head but stopped because of a pain in my neck. I hit the ground, released my koch fittings without

much difficulty and stood up. I saw my A-6 on fire, but almost completely intact.

The time from brake release to my ejection was 10-12 seconds. I ejected 3-5 seconds after the main gear came off the ground. I walked away with a bruised disk in my upper back and several other minor bruises and scrapes. The pilot hit the ground in his seat after his main chute deployed and severely injured both legs.

A failure in the flight-control linkage caused the mishap. The failure made the horizontal stab go to the full leading-edge down position. More importantly, the pilot couldn't control the horizontal stab after the failure, but because the failure occurred aft of the artificial feel system, all stick inputs felt normal to him. The aircraft rotated at minimum flying speed and liftoff occurred after only 800 to 1,000 feet of roll.

Although we couldn't have changed the outcome of this mishap, we learned several lessons. First, NFOs shouldn't depend on cues from their pilots to eject. If I had waited for him to tell me to go, we'd both be dead. Know your ejection criteria cold, then eject when you meet them. Your pilot may be too busy to tell you anything or even to realize how serious the situation has become.

Don't delay ejecting to tell the other crew member to go. When the situation gets ugly, telling the pilot to eject might not sink in as he fights to control the aircraft. You'll get his attention much faster by simply pulling your own handle.

For pilots, if your companion asks, "Do you have it?" answer quickly. His question indicates his grave concern about the flying qualities of your plane.

In this case, training didn't adequately prepare me to make an immediate decision to eject. I have more than 1,900 hours, and have been a NATOPS instructor for more than three-and-a-half years. In every WST I have been associated with, the crew has had some previous indication—fire light, hydraulic failure—that an ejection was in the cards. In this mishap, everything was normal until we took off.

From my first days in VT-10, people told me that if I stayed in Naval Aviation I would eventually have the pleasure of joining the Martin-Baker Tie Club. I never thought I would have to eject during a normal takeoff roll.

LCdr. Cordell was a BN with VA-145. He is currently the assistant AX class desk officer.

Know your ejection criteria cold, then eject when you meet them.

Have You Had A



Midairs are almost as old as aviation. From our first days in training, our instructors tell us about "see and avoid," clearing turns, and requesting radar advisories. All in an effort to avoid a midair collision.

My student and I had launched on a four-leg weekend cross-country with a stop at NAS Gulf Coast en route to Pensacola. Since this was an instrument training flight, I sat in the front while the student was behind me, under the bag. The first leg went fine and we entered the GCA box pattern.

We received outstanding handling from approach radar — excellent voice procedures, timely PAR calls, a single-frequency approach — under beautiful VFR conditions.

On the fourth trip around, we flew a practice precautionary approach on glideslope. My student had the controls and was doing well. I watched the instruments, jotting down notes on my kneeboard for the debrief. Inside of a mile, with clearance for a touch-and-go, I took control and told him to pop the bag. Immediately, we received a frantic waveoff call from approach with a garbled explanation that sounded like, "Tower has aircraft on the runway!"

No sooner had I added power and begun climbing than a small, twin-engined aircraft crossed under our nose! It must have taken me 30 seconds to regain enough composure to acknowledge the waveoff command and explain to approach what had just happened.

"Approach, that was close!" I think I said. I also told the controller that we would

Due to a lack of ph
contrast, these pag
reproduce well.

NMAC Yet?

By Lt. Warren Weisenburg

make a full stop on the next approach and that I wanted to see the supervisor after we landed.

We reconstructed the event; it was pretty simple. The other plane had been cleared to land on the perpendicular runway. Because of the airport layout, our two approaches crossed. The not-so-simple part was how the situation developed. I had not been warned of any possible landing traffic. The supervisor used the usual excuse of "training in progress." I asked to talk to the base operations officer. His philosophy seemed to be, "a miss is as good as a mile." That certainly didn't satisfy me. I called back to my base and talked with my XO. The command would file a report, requesting copies of the tapes, however, no action was ever taken. I found it hard to convince others just how close we had come. Most people figure that everyone experiences a NMAC sooner or later. It's just another inherent risk in Naval Aviation. Nevertheless, in retrospect, I failed to properly report the incident; I should have pressed on.

I had another exciting experience. My student was flying his fourth weapons hop, practicing high dive-bomb-

ing during the day, in preparation for his safe-for-solo checkride. I was in the rear seat and was very aware that sticking to procedures would be critical for this four-plane sortie. The division looked good in the rendezvous and while flying echelon before breaking over the target. We began our third dive recovery. The spacing was even and the pilots' calls were flawless. As my student pulled his nose through the horizon, I easily found our interval. I was satisfied that there wouldn't be a conflict in our climb and I began making notes on the student's hit and manual dive parameters.

Aviators all acquire talents of time-sharing and a rapid scan, understanding the need to continuously check and recheck all flight parameters. It was this time-sharing sense that saved my life.

The little buzzer in my head sounded. I checked the flight instruments and looked around.

"Altitude and airspeed are OK...interval is good...something in the quarter panel...oh, my god!" My motor response was basic: I grabbed the stick and pulled. We passed slightly above and aft of a small Cessna!

You can be sure that by the time I made the call, everyone was well aware of the violator's altitude and heading. He had clearly flown through R2510 airspace. A lap around the pattern and the press to complete the "x" quickly forced this episode to the back of my mind. To his credit, my student quickly regained his composure and continued pointing his nose at the dirt, putting bombs on target.

Surely, there must be a program designed to reduce the likelihood of NMACs. There is the Naval Aviation Safety program (OPNAVINST 3750.6Q). All of us in the flying business need to know about this program and be familiar with it. The program defines NMACs and encourages people to report them. ▶

Lt. Weisenburg flew A-7s with VA-27. He left active duty and is affiliated with the Naval Reserve in Dallas as a member of CAGRU-770. He was recalled to active duty during the Gulf War and assigned to CAGRU-7's staff in USS *Ranger* (CV-41).



A few points are

1. Report the NMAC by radio to the nearest FAA ATC facility or FSS.
2. Report the NMAC by telephone to the nearest ATC or FSS when you land.
3. Begin submitting a NMAC Hazard Report within your command.

Both of my NMACs occurred within a controlled airspace (an ATA and a restricted area).



Super *Stallion* the New SAR Star?

By Lt. T.J. Mueller

PH3 Tracy Lee Didas

While making a routine 400nm logistics run to a carrier in the Red Sea, we were tasked with the unthinkable. Yes, the mighty "Echo" had a SAR. An SH-3H had ditched three miles off the carrier's port bow with a full load of passengers. We heard the mayday while we were on a short final to spot 5. I quickly realized that we were the only airborne helicopter in the vicinity, so I volunteered to help.

"Are you SAR-capable?" the Air Boss asked.

"Good question," I thought. Then I replied, "No, but we have two 20-man rafts onboard." I immediately started looking for the SAR TACAIID that I hoped was still in my helmet bag.

I guess the boss figured we were better than nothing because he gave us a steer to the downed

helicopter. En route, I briefed that we would make one dry run to figure out how close we could get while minimizing the hazard from the rotor wash.

As we approached, I saw that the H-3 was still upright with its rotors stopped. The survivors were in the water.

We passed approximately 200 feet up wind at 75 feet altitude and 25 knots airspeed. My crewman reported effects from the rotor wash and we continued around to deploy a raft on the next pass. I had decided to drop the first raft uninflated because of the hazard and unknown effect of the rotor wash. I didn't want to be the first "Echo" driver to crash an aircraft with a 20-man raft stuck in the tail rotor. Unfortunately, the raft dropped 150 feet away from the survivors and

sank like a rock. "So much for floating just below the surface," I thought. "Looks like bad gouge from the PRs."

Before we could prepare for another pass, the carrier called us back to pick up swimmers and salvage equipment. By now, another H-3 had launched to pick up the survivors.

After a quick turnaround, we deployed three swimmers. Luckily, I was familiar with this mission, having done it several times during special ops training. We remained on station and monitored the salvage operation until we picked the swimmers up and returned to the carrier with our 7,000 pounds of cargo. We refueled for our 3.5-hour return flight to homeplate.

Two days later, I had the chance to talk to the CO of the squadron whose H-3 ditched. We decided it would have been better to drop the swimmers downwind for salvage ops when the aircraft to be salvaged is still on the surface and affected by winds. That way, the helicopter could get closer while minimizing the rotor wash's hazard. The aircraft could drift toward the swimmers instead of making them chase the aircraft. The swimmers reported no difficulties after they jumped, although they did mention the large amount of spray we kicked up.

I researched how the CH-53E fits into SAR operations. Unfortunately, I found little guidance. NATOPS says "personnel shall not be hoisted because of extreme hazards from static electricity

generated by the helicopter." Grounding the aircraft should be easy. A few simple methods might be attaching a metal lead to the hoist hook or attaching a 100-foot grounding line to the aircraft ramp or cabin area. If there are restrictions because of limitations in the hoist's design, these restrictions should be addressed in NATOPS. Rotor-wash hazards can be offset by a high hover. The hoist has 245 feet of usable cable, which should be more than enough.

I also recommend research into the safest method of deploying the LRU-15 raft from the CH-53E. You have to inflate the raft before you drop it; you could attach a lead to the raft's D-ring and secure the other end of the line to the single-point rig. Then you could drop the raft through the cargo access hole. As the raft falls away and inflates, the aircrew could use a quick-release koch fitting on the lead to release the raft and avoid catching it on parts of the aircraft.

I believe the CH-53E could be a viable day-VFR SAR platform. So, the next time you ask an "Echo" driver if his SAR quals are up-to-date, don't be satisfied if he laughs or looks confused. Tell him to hit the books. A life may depend on it.

Lt. Mueller flew with HC-2. He is currently assigned to the Naval Technical Training Center at Meridian.

Lt. Mueller aptly expresses his frustration at being "SAR helpless" in this situation. His story and suggestion solution for getting a lift raft to people is aimed at stimulating discussion on the subject. His methods have not been tested or officially approved as being safe or effective.—LCdr. Bob Miller, NAVSAFESEN H-3/H-53 Analyst





Left to right: AEAN Raoul Rijos, AE2 Ernest Lee

**AE2 Ernest Lee
AEAN Raoul Rijos
NAS Alameda**

20

While on a logistics flight from NAS North Island to NAS Alameda, AE2 Lee and AEAN Rijos, UC-12B aircrewmen, had become wary of a particular passenger. The retired service member had begun laughing uproariously when the pilots started the engines. The passenger regained his composure during taxi, but once airborne he began behaving erratically again.

The man had an escort, but the companion could not control him. Concerned about the safety of the other passengers and of their aircraft, AE2 Lee and AEAN Rijos separated, sitting full forward and full aft in the cabin.

As the C-12 began its approach to Alameda, the passenger became anxious and rushed toward the cockpit yelling, "Let me out of here! I need to land!"

AE2 Lee intercepted the man and tried to force him to return to his seat. The passenger then headed for the rear exit. AEAN Rijos blocked him, and

the two aircrewmen returned him to his seat, fastening his seatbelt. Had the passenger reached the aft exit and opened the hatch, the aircraft's pressurization would have ejected him from the plane. AEAN Rijos pinned the passenger to his seat until the aircraft had landed safely, and shut down.

As the passenger disembarked, he struck AEAN Rijos several times. The young airman restrained the man until Alameda terminal personnel arrived.

**Lt. Jack Harlow
Lt. Robert Baker
VF-31**

After two high-speed intercepts, Lt. Harlow (pilot) and Lt. Baker (RIO) noticed that their F-14's wings had not swept forward from 60 degrees as the aircraft decelerated. Lt. Harlow moved the emergency wingsweep forward to 20 degrees but the wings remained full aft.

Lt. Baker broke out the PCL and the crew covered procedures for an aft-wingsweep landing. After making a

controllability check, they decided on a 15-unit, 210-knot approach. Because of the high landing speed, the aircrew also decided to use the long-field arresting gear. The main concern was blowing a tire above the 190-knot tire speed.

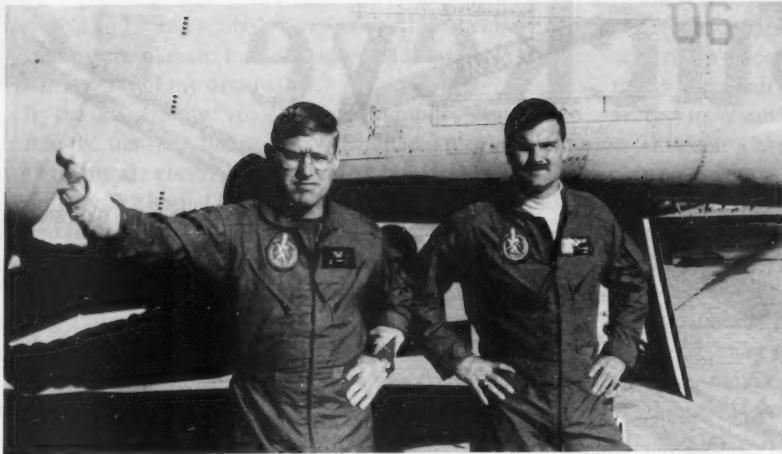
Following a straight-in approach, the F-14 touched down on the numbers at 210 knots without damaging the tires. At mid-field, and 160 knots and decelerating, Lt. Baker called out airspeed and distance remaining while Lt. Harlow dropped the hook at the 4-board. The pilot also lightly tapped the brakes to slow down.

As Lt. Harlow felt the hook bounce over the centerline lights, he maneuvered the Tomcat slightly left of centerline to avoid a hook skip. The aircraft engaged the arresting gear at a little more than 100 knots.

Left to right: Lt. Robert Baker, Lt. Jack Harlow



BRAVO ZULU



Left to right: Maj. Kenneth L. Jorgensen, USMCR; Capt. William J. Blalock III, USMCR

Maj. Kenneth L. Jorgensen,
USMCR
Capt. William J. Blalock III,
USMCR
VMFA-321

Combat 12 was the second F-4S in a flight of two. During the section go, as the Phantom rotated, it lost its forward canopy. Capt. Blalock (pilot) continued the takeoff and smoothly separated from his lead when he obtained safe clearance from the ground. Fighting the wind blast, he turned downwind, entering the overhead delta pattern to evaluate his situation.

Maj. Jorgensen (RIO) and Capt. Blalock completed the NATOPS immediate action procedures and discussed their options. After discussing the hazards of an out-of-envelope ejection, or the possibility of inadvertent ejection if the upper handles got caught in the airstream, the crew decided to land immediately.

Considering the added complication of an over-gross-weight landing, they told the tower to rig the long-field arresting gear. Capt. Blalock reduced the landing weight as much as he could, and landed the F-4 without incident.

An examination revealed that the bolts that hold the front canopy's stabilizing bracket had sheared when the canopy was closed, causing the swivel assembly for the gas line to over-rotate and break. The canopy-closure mechanism lost normal air pressure. Although a normal canopy-locked indication appeared in both cockpits, the forward canopy was held closed by only the weight of the canopy.

This problem would not have been detected during a normal preflight by maintenance personnel or the aircrew. The canopy was replaced and the Phantom was flying again within two days.

1stLt. Benton O. Driscoll, USMC
VMAT-203

While flying a low-altitude tactical training (LATT) sortie, 1stLt. Driscoll's AV-8B struck a large bird. The Harrier was at 430 feet AGL and 430 knots. The bird hit the leading edge of the right intake and wing root, and FODed the engine.

The engine jet pipe temperature (JPT) rose quickly and the rpm dropped below 30 percent. Complying with

NATOPS, 1stLt. Driscoll quickly zoom-climbed for altitude. He shut the engine down, switched to manual fuel and attempted an astart. He achieved a successful relight passing 300 feet AGL with the AV-8B beginning its climb back to altitude from 200 feet AGL.

The flight lead checked 1stLt. Driscoll's aircraft and confirmed the airframe damage. After a slow-flight controllability check at 10,000 feet, the flight made a straight-in approach to MCAS Cherry Point where 1stLt. Driscoll made a slow landing.

Postflight inspection revealed that the bird strike had damaged the engine's compressor section.

The Harrier has a great seat. First Lieutenant Driscoll knew where he was and remained within the safe-ejection envelope during this incident. Everyone has different personal limitations. Know your personal parameters and those of your seat, and never pass up that last safe ejection opportunity.

— Capt. K.J. Andrews, USMC,
NAVSAFECEN AV-8B analyst

21



Thunderbumper Buckeye

By LCdr. Skip Slyfield

JAN WILLIAMS



"DETAILED flight planning will save your reputation," I intoned to my student as we walked to base operations to file our flight plan for our cross-country training mission. A Thursday launch, a Sunday recovery, a solo boondoggle flight for the deserving instructor pilot and per diem to boot. I chuckled to myself as I pretended to carefully study the fledgling aviator's painstakingly prepared jet logs before tossing them into the circular file. I cheerfully announced that our entire route would be different from what we had planned.

"Flexibility," I said, "is the motto of Naval Aviation." His expression said it all as he watched me jettison hours of tedious planning. I smiled sympathetically remembering how many hours I had put into flight planning only to have some arrogant clown pitch them into the trash and mumble some nonsense about flexibility in the Navy. I'd flown this route many times. I had everything wired, right?

The weather-guesser revealed rain showers and possible thunderstorms building for the late afternoon at our Mountain West AFB destination. No sweat. Just the usual isolated

stuff. I'll be able to show Junior some real mountain flying. I just had to make sure to stop en route for extra gas and a check on developments. So, armed with our flight plans, weather forecasts, credit cards, and I've-been-there patches on our shoulders, we strapped into our T-2C and launched, anticipating many approaches in an uncluttered ATC environment followed by the sacred Navy ritual of twitting Air Force types at their club.

The first two legs were fine, and I regaled my student with tales of press-boat-bashing in Grenada. He laughed heartily in all the right places, and I decided he was a fine fellow, making a note about future above-averages for headwork. We landed at Desert Air Force Base and strolled into base ops for a weather update. Bad news: The thunderbumpers had settled in over our final destination and would prevent us from landing there. We were stuck. After telephoning our apologies to our hosts at the base, we settled into the local hotel.

Dawn found us back in the weather office studying the charts more closely than the day before. I decided that if I could hustle up to NAS West Coast and drop off my student, I could make it in one leg to Mountain West AFB, beat the afternoon thunderstorms, make happy hour at the club, and even have a legal alternate. Weather was forecast as clear and a million everywhere with those pesky thunderstorms

building in the mountain areas.

In the back of the Buckeye, I rummaged around in my nav bag and finally found some yellowed jet logs and a half-melted whiz wheel CR-2 computer. No harm in doing a little practice planning. I was glad I had let the student fly from the front seat so I could scribble away unobserved behind him. I carefully pre-planned fuel, altitudes and all possible divert airfields north of my destination.

By the time that my "voice-actuated autopilot" had taxied us into the transient line at the NAS, I had a nice piece of work on my kneeboard. As my student proudly showed off the mighty T-2 Radial Interceptor to his admiring relations, I raced for base ops and a weather update. It was just as I had anticipated: minimal thunderstorm development in the area. My solo trip was a go. With a hurried goodbye and a full bag of gas, I blasted off. Climbout was normal, and I settled down for a blissful flight alone.

The radio had been acting up the last two days, and now it started to hiss and crackle like an angry goose. I switched on squelch-disable to boost the reception and grimly accepted the accompanying static. It was definitely worth the improved reception. About 300 miles short of my destination, ATC told me the weather at Mountain West AFB was deteriorating but still OK. The local F-16s were still flying. I decided that if the Air Force weenies could hack it, it couldn't be too bad. I signed off and settled back as comfortably as I could in the T-2 ejection "seat-of-discipline."

As I flew across the trackless sands of Utah, I noticed an alarming pileup of ominous-looking clouds ahead. The thunderstorms were isolated, though, right? It was time to change TACANs, but the channel switch knob was being difficult and wouldn't move. I gave it a strong tug and ended up staring at the top of the coffee-grinder contraption that had broken off in my hand.

The TACAN needle slowly unlocked and began a stately, aimless circular sweep. Before it had unlocked, the needle had pointed to a large, mean mass of precipitation with ugly anvil-headed clouds protruding from the top. Purposely dropping my voice an octave, I told ATC that I had lost my primary navigation equipment. They were already busy and told me to proceed direct.

Sheepishly, I admitted I had really lost all of my navigation capability except for the increasingly doubtful radio. That was OK with them, however, and they still told me to proceed direct.

I pointed my jet in a likely direction, and, disguising my annoyance, I asked to switch to Mountain West metro. After switching, I was treated to monstrous amounts of static punctuated by random blasts of noise. The forecaster sounded like he was hiding under a counter and told me that there were thunderstorms over the field, and all around, all moving toward him.

The civilian international airport had just closed, and the airliners were all heading north. This couldn't be happening. Just an hour ago, the forecaster had told me the thunderstorms were isolated showers.

Things had really heated up at ATC. They told me I would have to descend now. No, the controller was too busy to pick out a storm-free avenue for one measly Navy jet. It was time to fish or cut bait, so I declared minimum fuel and requested vectors to Windswept AFB, my alternate.

The controller turned me vaguely north, told me that I was cleared direct, to switch frequencies and not to even think about climbing to my requested max-conserve bingo altitude. As I switched frequencies, I was greeted by absolute silence. No hiss, no static, no tone – nothing. I frantically switched back to the previous frequency but got the same silence. Emergency guard was the same. I stared out of the windscreens and took stock. No navaids, no ground reference, low fuel, no clue.

I thought about ending up as an example in an Approach article that everyone reads and says, "Boy! I'd never be that stupid!" Then I remembered my faded jet log. I had even figured magnetic headings. Of course, those depended on knowing where I was, but I settled down, wound my clock, set the emergency squawk and formulated my plan.

In five minutes, I would climb to the top of my fuel-saving profile and strike out toward Canada. I had looked at all the airfields on the northern track, everything from 6,000 feet of concrete to a grass strip. Had anyone ever landed a T-2 on the grass? Would I be the first? I resolved that if I had to eject because of fuel starvation, I'd head off into the woods and become another Jeremiah Johnson, saving the Navy the cost of the bullet I would so richly deserve.

Idly, I switched back up to the Air Force range control frequency and called. To my relief, my plaintive transmission got through and they answered, loud and clear. The controller gave me a vector but firmly insisted that I couldn't climb just yet because an airliner stack was directly overhead.

I landed safely at my alternate and staggered out of the trainer. I enlisted the help of the crowd of mechs and techs that had gathered to gawk at the orange-and-white War Guppy. They changed TACAN boxes, pumped the radio with air, and filled the tanks with JP. Then, I went to base ops to refile my flight plan. This time, I called Mountain West myself as well as the National Weather Service, NOAA, and the Channel Seven Live-At-Five meteorologist. The weather had completely cleared, and the flight south was beautiful. But, in the break, the radio gave up the ghost again. Twenty-five emergency vehicles escorted me to the transient line with flashing lights. I was the only show in town, and I managed to make quite an entrance.

LCdr. Slyfield is a Naval Air Reservist flying S-3As with VS-0294 at NAS North Island. On active duty, he served a tour as an instructor with VT-23.

Are Your Three Bags Full?

by Cdr. John Indorf

I was on an extended training mission as an FRS student and everything was going fine on the return leg when the port combined-hydraulic gauge dropped to zero. The grizzled instructor pilot with lots of Vietnam experience calmly said, "Looks like we'll have to watch that." Within a minute or two, the starboard system's gauge also went to zero and the backup hydraulic light came on.

Although this was a good sign, it certainly wasn't the best situation. A generally uneventful hop



for a BN with 25 hours in the A-6 was becoming more than a routine training flight. We discussed potential divert fields in the brief and figured that the best divert was 400nm away. The weather was great and the Intruder kept flying. Time passed quickly as we told center of our intentions and discussed emergency procedures. It was going to be a textbook procedure right out of the NATOPS PCL: dump fuel to safe landing weight, slow to 180 knots, and lower the flaps and slats electrically. Then, lower the landing gear handle and blow the rollers down at 150 knots, drop the hook and make my first field arrestment.

We arrived overhead the divert field, and an LSO told us he would help us trap. Everything was falling into place and the emergency procedures were working until the nose landing gear failed to indicate down and locked. Tapping the integrated position indicator didn't help. As we flew past him, the LSO confirmed that the nose gear was still up.

My instructor didn't look too upset. "This happens every once in a while," he said. "But I can make it come down."

Working quickly because we didn't have much of a fuel cushion, he raised the flaps and slats electrically and accelerated to get more G. Still following the PCL

procedures, the pilot yanked and banked but the indicator stubbornly remained barberspoled.

Paddles confirmed the absence of the nose gear and tower told us that a foam truck was moving to the approach end of the runway.

Optimistically, the instructor said that a touch-and-go might do the trick, but it didn't. Tower was pushing us to find out fuel and souls on board. They wanted us to commit the foam trucks to the runway.

(that wonderful sound I have since learned to appreciate), he dejectedly told the LSO that he didn't think that the nose gear had come down. Paddles confirmed it on another flyby.

We discussed the impending nose-gear-up landing. Triple checking the ejection seat straps, he asked me, "Before we have them foam the runway, have you got any ideas?"

I looked up through the canopy to the cloudless sky and asked over the ICS to no one in particular, "Hey, how about a nose gear?"

There we were, 10 miles from the field in steady 1-G flight after doing everything we could, when the nose gear finally "klunked." The IPI window showed safe, and shaking his head in amazement, the pilot let out an uncharacteristic laugh. Another flyby confirmed that the nose gear was down and we made an OK pass to the wire. As we were towed off the runway, my pilot said, "If I ever have to go into combat again, I want to go with you."

The Naval Aviator has three bags of tricks: knowledge, experience and luck. During our careers, we dip into these bags to varying degrees on every flight we make. The bag of luck is very small in our business. We need to constantly build up those two bags of knowledge and experience and not rely on the bag of luck to pull us through the tough spots. ◀

Cdr. Indorf is the CO of VA-165.

"Before we have them foam the runway, have you got any ideas?"

"Not yet," the pilot said, "I'm going to try some more 'G'."

He cleaned up the wings and accelerated beyond the limit speed for the main landing gear doors. When we didn't hear the "klunk"

It was a great day to fly. We had all the prerequisites for a good hop: a day sortie, clear skies, a good mission and a crew of JOs. I had just received my aircraft commander qualification and felt comfortable with my abilities.

My COTAC was a junior NFO who had just come back from Christmas leave and had not flown for 12 days. The TACCO and SENSO in the back seats had flown recently. Our crew brief went well.

Our mission was ASW/Tactics, which meant going out to the warning area, finding a surface contact (or subsurface if we were lucky) and prosecuting him with every sensor we had. The mission would mean a lot of low-altitude maneuvering. Nothing new for us. We'd done it a hundred times between us and to use the phrase that got me into trouble with the skipper during an AOM, "It was no big deal."

The fuel load on the flight schedule called for 13.1 (full internal). However, when I went to sign for my War Hoover, the maintenance chief told me that we had two full droptanks. No big deal. We might come back a little heavy after our 2.5-hour hop, but I'd just have to add a little power and flare the landing.

Everything went well during the first hour of the flight. We had found some of our surface buddies and we got some good acoustic training.

No Big Deal

By Lt. Gavin W. Balan

I had been transferring my external tanks for about 30 minutes. Standard procedure is to discontinue transfer when the gauge indicates 500-300 pounds remaining. That's to prevent overpressurizing the tanks and causing an inadvertent dump through the fuel vent. (The remaining fuel gets transferred when you are on your way to homeplate.)

In order to check the external fuel, you have to hold the quantity switch in the external position. Unfortunately, I had decided to do just that while in a 35-degree angle-of-bank turn at 850 feet, and at 13 units AOA (onspeed is 15 units). As I was watching the fuel needles drop down to indicate my external fuel quantity, my COTAC decided to watch with me. At this point, neither one of us was watching the horizon, the VSI, or the altimeter.

I'm not quite sure what it was that first gave me the feeling that something wasn't right. It may have been my peripheral vision that let me see my windscreen filling with water as my plane's nose fell through the horizon. It may have been that sinking feeling as my VSI went from 0 to 800

fpm—down. Or it may have been the beeping of my radar altimeter that went off as the aircraft passed through 450 feet.

I guess it doesn't really matter, because I caught it, leveled off, added power and recovered at 300 feet. (By the way, that was 300 feet on my baro altimeter, about 50 feet higher than my radar altimeter.)

As I stopped my descent and climbed away from the water, the TACCO came up on the ICS. He sounded displeased.

"You guys watch what you're doing up there."

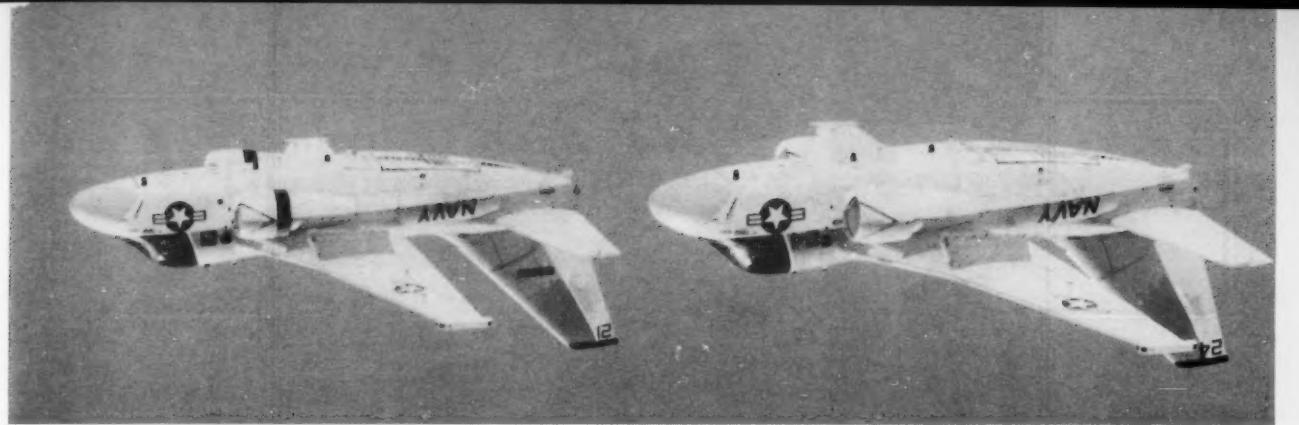
The COTAC and I discussed how stupid we were and agreed that we would not have our heads in the cockpit at the same time again. The rest of the hop was quiet and we returned for a safe landing at homeplate.

The next day, I was scheduled to give a lecture on a recent S-3 mishap during our safety standdown. (I was my squadron's ASO.) I thought about it a bit and then talked to the Safety Officer and told him about my incident the day before. I wanted to "bleed" during his crew coordination brief, in hopes of preventing my squadromates from pulling the same stunt.

As I anticipated, I got a little ribbing, not only for what I did, but for also getting up and telling everyone about it. I was surprised to find out later that two other pilots in my squadron had had similar experiences. (One even bottomed out at 125 feet AGL from an altitude of 1,000 feet AGL.) I hoped that I had set a precedent by coming forward with my experience. That's why I wrote this article. As Steve Martin said to John Candy in the movie, "Planes, Trains and Automobiles," "When you tell a story, always have a point. It makes it so much more interesting for the listener."

Lt. Balan flies with VS-35. He previously served with VS-33.





PHCS (AC) R.L. Lawson, USN

Formation Barrel Roll—in an S-3?

By Lt. Nelson Hendricks

We had just returned from Fallon and were all feeling pretty cocky. The skipper, two other crewmen and I briefed for a day formation hop. I would fly with a new pilot, and the skipper would fly with a new NFO.

We briefed formation takeoffs, break up and rendezvous, and formation approaches. At the end of the brief, I joked with the skipper that maybe today we should try an S-3 "War Hoover" formation barrel roll. We all laughed.

Once in the aircraft, I felt I might be in for an interesting hop when the new pilot asked my permission to start the aircraft.

"I guess I better keep a close eye on this guy," I thought. He had obviously not flown with many NFOs and I had never flown with such a junior pilot.

The flight went fine, with the skipper in the lead. He began a few formation turns. We were at about 15,000 feet, on the CO's starboard wing, when we entered the next left turn, but kept turning. At about 90 degrees bank, I realized that we were actually going to do a roll. My new pilot was concentrating on keeping his relative sight picture and I hesitated to tell him that we were inverted, in the middle of a formation barrel roll.

He stayed calm and completed the maneuver.

Next, it was our turn to lead. Again the approaches and breakup and rendezvous went without a hitch. The new guy looked over and asked, "Should we lead through a barrel roll just like the skipper did?"

I gulped and answered in my saltiest, second-cruise lieutenant's voice, "If that old man can do it, so can we."

The roll went well until we were inverted. At that point, my pilot stopped our rotation and the nose promptly sank. Our formation headed toward the water like two rocks. The altimeter spun like I had never seen it spin before.

The pilot and I both grabbed for the throttles. He expressed concern about where our wingman (the skipper) was. I told him that our main concern at this point was to pull the aircraft out of the dive and to let the skipper worry about himself. We recovered too close to the water for me to even think about.

We looked for the skipper. A moment later, he flew by our port side and calmly called, "I think we can call it a day."

Our flight home was quiet. I couldn't help thinking how painful the debrief would be. I had truly enjoyed being a mission commander—while it lasted.

On deck, all the CO said was, "Meet me in my office." A cold rush went through me and I'm sure it also went through my pilot. We both envisioned what khakis looked like without wings.

When we entered his office, the skipper sat quietly behind his desk reading some paperwork. His NFO was in the hot seat looking very uncomfortable. The CO asked us to close the door, and in a matter-of-fact voice, he said, "Gentlemen, today's near-disaster was entirely my fault. I began an unauthorized and unbriefed maneuver, and I believe we all learned a lot from it. That's all."

Without saying a word, we all got up and left. The three of us let out a collective sigh of relief, like three small boys getting away with stealing candy. We knew we had done wrong, but we were happy to get away with it. The skipper was right. We had learned a lot from this incident.

I made some very bad judgment calls, first of which was no flatlining, pure and simple. No matter how senior you get, don't think you are above the rules. Don't always trust the senior guy to make the right call. If something is unsafe, break it off. Know your personal limits and the limits of your plane. And don't push these limits!

Lt. Hendricks is a TAR assigned to the Naval Air Reserve in San Diego.



PH1 Michael D.P. Flynn

The Aviation Life Support Systems Operator Advisory

By LCdr. D.C. Nimmich, Jr.

“Why doesn’t the system listen to me? I have to wear this stuff, fight in it, and, if necessary, escape and survive in it. Why can’t I get just one person to listen to me?”

Have you ever asked these questions about your flight gear? We take a personal interest in everything we put on, from our helmets to our steel-toed boots.

We should have direct access to the people who decide what equipment we use, or who fund the development and production programs for the next

The individual aircrew member is the key to the success of the OAG.

generation of survival gear. We do, through the Aviation Life Support Systems Operator Advisory Group (ALSS OAG).

Until the fall of 1989, the only way to voice ALSS concerns was through the Integrated Logistic Support/Acquisition Management Panel (ILS/AMP). However, this group was really oriented toward solving in-service problems and acquiring more of the equipment already in the fleet.

After a major reorganization including ILS/AMP and several related agencies, the ALSS OAG held its first conference at NAS Oceana in November 1989. The group had a streamlined set of marching orders to develop and procure ALSS equipment.

The OAG is made up of three major communities: rotary-wing, fixed-wing ejection seat, and fixed-wing non-ejection seat. A national OAG conference, with representatives of each of the type commands or functional wings within the three general communities, establishes its "top ten" priorities for ALSS development. An executive board composed of representatives from the type commanders, Navy and Marine Corps, then considers this top-ten list.

The executive board develops one master list covering the entire range of ALSS, from helmets and body armor to helicopter egress devices and torso harnesses.

The board's list then goes to the OPNAV resource sponsor, OP-05, for approval. Once approved, the list becomes direction for NAVAIR.

The national OAG is a forum for operators to get together and share information. Participation is open to all interested people. However, to best use the conference time, mini-OAG meetings within each community are strongly encouraged *before* the na-

tional meeting.

Here is the way an aviator could turn his idea into reality through ALSS OAG.

Lt. Brownshoe has a new idea for an improved flight helmet. He wants to remove the visor from the top of his existing helmet, put a swivel mount and multi-position lock on the side. This arrangement would lighten the helmet and lower the CG. All his squadronmates love the idea.

The lieutenant presents his idea at the next local, mini-OAG where his proposal receives enthusiastic endorsement. The local meeting also recommends that the new design be one of the top priorities to the national OAG.

At the national OAG, Lt. Brownshoe wins TYCOM support and his new helmet design goes onto the top-ten list. The list goes to NAVAIR by DCNO (Air Warfare) to begin the procurement process.

When the new helmet reaches the fleet, it's an instant success since the lower CG and reduced weight make it far more comfortable, especially during high-G maneuvers.

The individual aircrew member is the key to the success of the OAG. By aggressively fostering squadron, wing, and tycom participation in the national conference—instead of just whining about your frustrations in the ready room—you can make a difference and ensure that the people in Washington know about your concerns and ideas.

If you want copies of the ALSS OAG charter, or more information on the ALSS acquisition process, write to Chief of Naval Operations (Air Warfare) OP-505F, Washington, D.C. 20350-2000.

LCDR. Nimmich is the Naval Aircrew Survivability Requirements Officer at OP-505F.



Stick in My Lap,

As the newest nugget in my squadron, I was about as inexperienced as they come. The ship was off Korea participating in an annual exercise. After 10 traps, I was beginning to feel comfortable onboard the "rockin and rollin" Midway.

I had flown a few tanker missions, hauled around a useless tactical relay pod, and found just about every Soviet ship in the Sea of Japan. I was ready for something a little more challenging.

Apparently the scheduler was reading my mind. The next day I was supposed to drop six inert 500-pound bombs at Koon-ni target on the west coast of Korea. My BN and I launched for a 1+30 cycle. The ship was not at its

Throttles

to

Military

By Lt. Mark Kelly

briefed launch position and it quickly became obvious that we would be pressed for time. We decided to forget about the scheduled low-level and head straight for the target. About halfway there I told my BN that I didn't think we would have any time to bomb once

we got there.

He was an experienced Cat II, and he decided that we would continue to the target, make one hot run, drop all our bombs on the first pass, and buster back to mother. Since I had not dropped a single bomb since the FRS, I was more than a little apprehensive about rushing to an unfamiliar target to make a hot run with 3,000 pounds of ordnance.

We arrived at the target with no time to spare. The setting sun and the low-lying haze created extremely poor visibility. We turned in at 10 miles for a system laydown. At about eight miles and 500 feet, my BN told me his radar had failed. With no chance of seeing the target in the haze, from this altitude, I

decided to climb to 3,000 feet for a 10-degree dive delivery.

Through the haze and the glare of the sun, I finally saw the target at nine o'clock. The BN placed the master arm on, I stepped the computer into attack, pulled the nose across the horizon, rolled inverted, and pulled the moveable reticle down just short of the target. When I rolled upright my heart nearly fell into my stomach. I was in a 30-degree dive and already past 2,000 feet!

The stick went instinctively into my lap, the throttles went to military, I picked off the bombs and then watched the altimeter wind down—1,500 feet, 1,000 feet. The aircraft began to buffet so I released some back pressure—500 feet, 400 feet, 300, 200. The Intruder began climbing again at about 100 feet. In a very calm tone, my BN said, "Hey, we almost flew into the ground."

"Yeah, I know," I replied. "Sorry."

"Eagle 504, your hit 10 at nine o'clock." The Air Force range controller must have been very impressed watching an A-6 pull out of a 30-degree dive at 100 feet.

The flight back to the ship was quiet. It gave me time to think about what had happened. While intrud-

ers have a terrible reputation for controlled flights into the ground, it's rare that such a mishap happens in daylight. I thought about this flight again and again for weeks. What had caused me to almost fly a perfectly good airplane into the ground?

If the hair on the back of your neck stands up, don't ignore it. If you're uncomfortable with any part of the flight, pause and think about what you are doing. Abort an attack run, knock off a fight, or wave off an approach if it doesn't feel right.

VMC in haze, with no horizon, is not VMC. Constantly cross-check your instruments under adverse conditions.

When making a dive delivery, don't blindly pull your nose to the target. You need to plan a specific dive angle, with corresponding roll-in and pull-out altitudes, then stick to it. Now, my habit pattern is to continuously monitor dive angle during the roll-in. NFOs need to do this, too. Remember, the ground has a Pk of 1.0. ◀

Lt. Kelly is an A-6 pilot with VA-115.

Minimum pull-out altitude and minimum ejection altitude are two more things you need to plan for before every weapons hop or whenever you plan on throwing yourself at the ground. Whether you use a "gouge" formula (i.e. airspeed times dive angle divided by 10 for minimum ejection altitude), or the NATOPS charts, calculate these minimum altitudes for each type of dive delivery then brief them.—Ed.

31

**If you have a
plan, cover it
in the brief.
Implement it
just like you
briefed it.**

PH3 Mac M. Thurston



Class A Flight Mishaps HOW GOES IT?

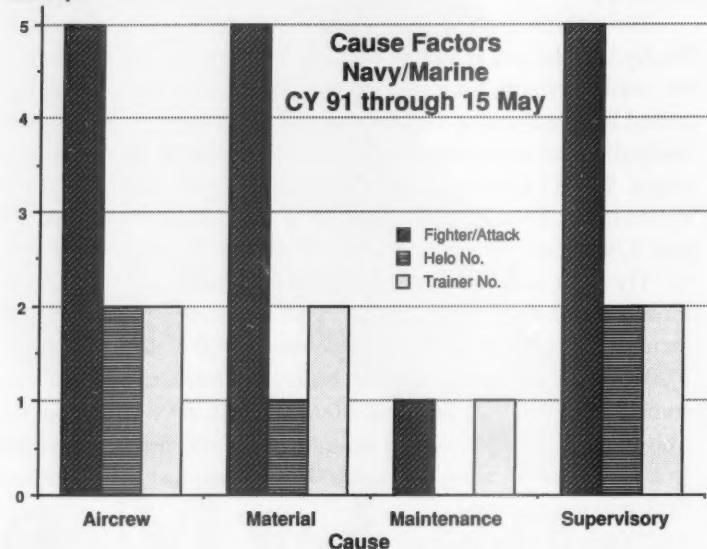
CY 91 THRU 15 MAY CY 91 (TOTAL YEAR)

MODEL	NUMBER	FORECAST
A-4(Less TA-4)	1	3
A-6(Less EA-6)	1	4
EA-6	1	1
A-7	0	1
AV-8	4	7
F-14	0	5
F/A-18	7	6
H-1	3	3
H-2	0	3
H-3	0	3
H-46	3	3
H-53	1	2
H-60	1	3
OV-10	0	1
S-3	0	1
TA-4	2	4
T-2	1	2
T-34	1	1
Other	2	2
P-3	1	
T-39	1	
Total	28	55

32



Mishaps



MISHAP-FREE MILESTONES

The following commands have been recognized for their achievements in Class A flight mishap-free operation:

COMMAND	DATE (1991)	HOURS	YEARS
HMH-361	28 MAR	25,000	5
VMFA-232	1 APR	40,000	11
VMA-223	1 APR	5,000	1
HSL-37	4 APR	7,000	1
VFA-303	6 APR	47,000	16
VC-1	9 APR	24,000	8
VMFA-531	12 APR	40,000	7
VP-47	12 APR	115,000	18
VT-2	15 APR	191,000	4
VAQ-131	15 APR	7,000	4
VMGR-252	15 APR	307,000	36
MAG-12	17 APR	20,000	1
VT-3	18 APR	223,000	5
VF-41	19 APR	44,000	11
VA-35	19 APR	27,000	6
VAW-122	19 APR	36,000	17
VP-93	23 APR	34,000	10

CY 91 THRU 15 MAY				CY 90 THRU 15 MAY				16 MAY 1990 THRU 15 MAY 1991				CY 90 (TOTAL YEAR)					
NO.	RATE	DEST A/C	FATAL	NO.	RATE	DEST A/C	FATAL	NO.	RATE	DEST A/C	FATAL	NO.	RATE	DEST A/C	FATAL		
NAVY	17	2.64	18	39	13	1.93	13	8	38	2.23	40	56	NAVY	34	1.96	35	25
MARINE	11	6.00	11	7	14	8.21	14	3	26	6.12	26	21	MARINE	29	7.04	29	17
NAVY/MARINE	28	3.38	29	46	27	3.20	27	11	64	3.01	66	77	NAVY/MARINE	63	2.94	64	42

LETTERS

Re: "Bugsmasher at One, No,Three, Make It Seven O'Clock!" (January '91)

NAS Dallas, Texas — I read LCDR. Wickliff's article with interest. It emphasizes the need for aircrew to continuously look for traffic whether in VMC or IMC.

I'm an ATC officer with 16 years of experience, including a tour at Pt. Mugu (the "oceanside" air station LCDR. Wickliff refers to). I have to dispute his description of the capabilities of "precision radar" at that facility. The FPN-63 PAR, which is standard in the Navy, paints *only* raw radar targets, not the transponder squawks he described. In fact, any aircraft which flies through the azimuth or glideslope scans of the radar will be painted, no transponder required.

A final controller can see unknown traffic and make a call to a pilot. Additionally, SOP at approach control facilities, and throughout ATC, is that both the final and approach controllers monitor instrument approaches to touchdown and provide traffic advisories when able. I can't explain in this case why neither controller saw the civilian traffic; however, the final controller *should* have.

My main concern is that aircrews reading this article be made aware of the actual capabilities of the ATC system and radars. Many who have read LCDR. Wickliff's article will get the wrong impression of what ATC can provide. Aircrews are not

given adequate training in this area. Often, their only training in ATC equipment is a quick brief in Primary, and a five-second tour of a radar facility or a CATCC. How much do they really understand? Do they know what to ask from ATC?

Also, many regard what they read in *Approach* as good information. The Naval Safety Center has a wealth of experience in its various analysts, including the incumbent ATC master chief. Any article that is submitted on ATC should go through him for verification.

I continue to enjoy *Approach* and ATC articles always grab my interest.

Ltjg. R.B. Coco
Ops/ATC Division

● All the stories in *Approach* are read and approved by the associated analyst when he is available, i.e. not on leave or on a safety survey. At such times, another analyst may fill in for the regular member. Even with this long-established system of checks, errors do occur, and we are glad to hear from people like Ltjg. Coco, who also appeared in our letters column in the April '91 issue. — Ed.



source of information. Over the last 13 years I have used articles and quotes from the magazine in my survival presentations.

TSGT. A.E. Casey Hermanson, USAF
323 FTW HOSP/SGT

● Thanks for the kind words about BSIA and Approach. We'll pass them on to Lt. Carroll—if we can catch up to him. From what we understand, he's rarely on the ground these days. Thanks, also, for your list of quotes. We'll keep a few to use when we can. — Ed.

Corrections

"Field Arrestments: A Sign of Weakness?" in the April '91 issue incorrectly gave the formula for computing hydroplaning speed. The correct formula is Knots = $9 \times \sqrt{\text{tire psi}}$. This formula applies only to smooth or closed pattern tread or where the depth of the water exceeds the depth of the tread.

In the June issue, LCDR. Art Gratas wrote "Basket Buffoonery," and LCDR. Dave Mitchell authored "Wimp-Phobia."

Thanks to all our loyal readers who so kindly pointed out the error. — Ed.

Re: Hello Skipper? Could you send us a canopy? (December '90)

NAS Chase Field, Texas — In the middle of the article, Maj. Craig relates how he could have prevented this mishap. He recalls a similar incident eight years before in another squadron.

When the system works, there would have been a mishap investigation after the first canopy was lost. Part of the investigation process is to recommend changes that will prevent similar mishaps. In this case, the author did not mention any recommended NATOPS change to the big book or PCL.

"Reinforcing good habit patterns and procedures is a key issue here," writes Maj. Craig. "Essential items can be left out of procedures because people are unfamiliar with the sequence or because procedures aren't routine." *Or because they have not been included in the book.* I would have enjoyed the story more if he had made the direct connection between the mishap and a NATOPS change.

The system works when we use it. Part of the system is OPNAVINST 3710.7N which says, "If an individual knows a better procedure or sees conflict between NATOPS and other doctrine, he is obligated to propose a change to the applicable publication." As part of how the system works, when we use it, I recommend a change to the A-6 NATOPS and PCL servicing sections requiring installing the safety pin for the canopy chamber cartridge before servicing. Maybe we can prevent another loss.

LCDR. John F. Cullinan
Safety Officer, VT-26

Re: Ejection Over the Beach (April '91)

NAS Oceana — I am a Royal Navy exchange officer serving as the Air Traffic Control Facility officer. Whilst I thoroughly enjoy reading *Approach*, I felt obliged to take issue with the inferences in this article concerning communications with this ATC facility.

Firstly, the aircraft was not on base departure frequency, but rather with another agency. Secondly, the tower controllers correctly observed the aircraft launch, retract its gear, begin its climbout and ensured that it had no conflict before diverting their attention to other matters.

Thirdly, the pilot was not in communication with homeplate. Therefore, his mayday call to the other agency was not heard by base. Had he called on 243.0 (UHF Guard) to tell them about his problem, the situation *may* have been different.

I realize that the author did not write his article to intentionally slam-dunk air traffic control at this facility, however, without this clarification, a casual reader would naturally assume that we were negligent, which was not true.

As a rule, ACs get very little recognition for the fine work they do. They certainly do not need adverse criticism, especially when they were not at fault.

Lt. R.J.L. Marsh, RN



PH3 Norman

When you're this close there's very
little margin for error...

stay alert,

stay aware;

stay alive!

LIBRARY OF MICHIGAN

JUL 30 1991

U.S. DOCUMENT
RECEIVED DEPOSITORY

